GENERAL SPECIFICATIONS:

IN THE EVENT THAT ANY PILE PENETRATION CANNOT BE ATTAINED THE CONTRACTOR SHALL CONTACT THE DESIGN ENGINEER. FOR ANY LOCATION WHERE PILE DEPTH CAN NOT BE ACHIEVED THE CONTRACTOR SHALL RECORD THOSE LOCATIONS AND SUBMIT RECORDS TO THE DESIGN ENGINEER.

ALL WOOD PILINGS SHALL BE 12" DIAMETER SOUTHERN PINE WITH A MINIMUM TIP DIAMETER OF 8". MINIMUM PILE DIAMETER AT MUDLINE SHALL BE 10". PRESSURE TREATMENT SHALL BE 2.5 LB/CF CCA. PILES SHALL BE DRIVEN TO DEPTHS AS INDICATED ON THE PLAN. PILES MAY BE DRIVEN USING A VIBRATORY HAMMER AS LONG AS THE MINIMUM PILE PENETRATION CAN BE ATTAINED.

ALL OTHER STRUCTURAL MEMBERS SHALL BE SOUTHERN PINE OR EQUIVALENT. MINIMUM TREATMENT FOR CROSS BRACING SHALL BE 2.5 LB/CF OF CCA. DIAGONAL BRACING SHALL NOT BE CUT BELOW THE MHW LINE. ALL CUTTING OF SUCH MEMBERS SHALL BE DONE ON THE END ABOVE MHW. FOR ALL OTHER MEMBERS

(STRINGERS, HEADERS, WOOD DECKING AND ANY POST OR RAILS) TREATMENT SHALL BE 0.6 LB/CF CCA.

ALL METAL CONNECTION MATERIALS SHALL BE HOT DIPPED GALVANIZED. BOLTS SHALL BE A MINIMUM OF 36KSI STEEL. ALL BOLTED CONNECTIONS FOR HEADERS AND BRACING MEMBERS SHALL BE LOCATED A MINIMUM OF 4" FROM THE END OF THE MEMBER, AND 2" FROM THE EDGE OF THE MEMBER. MEMBERS THAT ARE SPLIT OR CRACKED IN THE AREA OF THE BOLT LOCATION SHALL NOT BE USED. FOR ALL 1" BOLTS PROVIDE 2" WASHERS BOTH SIDES.

DECKING FOR FIXED DOCK SHALL BE 54"x6" COMPOSITE OR WOOD MEMBERS. ALTERNATIVELY 2X6 MEMBERS CAN BE USED. FASTENERS FOR DECKING SHALL BE 2½" GALVANIZED STEEL SCREWS TWO AT EACH ATTACHMENT LOCATIONS.

FLOATING DOCK SHALL BE OF WOOD CONSTRUCTION AND HAVE APPROXIMATELY 18" FREEBOARD AND 6" DRAFT. DECKING SHALL BE \(\frac{4}{\text{"x}} \) 6" COMPOSITE.
FLOATING DOCKS SHALL HAVE HEAVY DUTY INSIDE AND OUTSIDE CORNER HARDWARE AT EACH CORNER LOCATION (FOLLANSBEE WD—E AND WD—IN OR EQUAL).
ANGLE CLIPS (FOLLANSBEE RWD—A OR EQUAL) SHALL BE PROVIDED FOR INTERIOR STRUCTURAL MEMBERS AS INDICATED. CLIPS SHALL BE FASTENED USING 2"x3/8" GALVANIZED LAG BOLTS INTO EACH CONNECTING MEMBER.

FLOAT DRUMS SHALL BE FOAM FILLED POLYTHYLENE WITH UV INHIBITORS AND SHALL HAVE STRUCTURAL MOUNTING FLANGES. DESIGN IS BASED ON FLOAT DRUMS AS MANUFACTURED BY "CUSTOM FLOATS." ANY PROPOSED SUBSTITUTES SHALL BE APPROVED BY THE DESIGN ENGINEER.

SECURE FLOAT DRUMS AT ALL EDGES IN CONTACT WITH STRUCTURAL MEMBERS. FOLLOW MANUFACTURES SPECIFICATIONS. 3/8" LAG BOLTS WITH 1½" WASHERS AND 1" PENETRATON INTO STRUCTURAL MEMBER SHALL BE A REQUIRED MINIMUM. WHERE TWO DRUMS MEET ON THE SAME STRUCTURAL MEMBER, USE ONE FASTENER FOR EACH DRUM.

PILE HOLDERS FOR FLOATING DOCK PILES SHALL BE HEAVY DUTY GALVANIZED, CHAIN TYPE FOR USE WITH 12" PILINGS (FOLLANSBEE PH-C OR EQUAL). PLACEMENT OF ALL PILES SHALL BE SO AS TO ALLOW FLOAT TO BE TIED OFF FROM PILINGS SUCH THAT NO CONTACT WITH PILINGS OCCURS.

AS AN ALTERNATIVE, PILE HOLDERS FOR FLOATING DOCK MAY BE HEAVY DUTY GALVANIZED, SINGLE ROLLER TYPE FOR USE WITH 12" PILINGS (FOLLANSBEE PH—H14R OR EQUAL). PLACEMENT OF ALL PILES SHALL BE SO AS TO ALLOW MOVEMENT OF THE FLOAT TO AVOID EXCESSIVE RUBBING OF HOOPS.

SECURE PILE HOLDERS TO FLOATING DOCK WITH 4—½" THROUGH BOLTS (IN HORIZONTAL DIRECTION) AND 4—¾" LAG BOLTS (VERTICAL DIRECTION). USE 3"X10" SPLICE BLOCK BEHIND OUTSIDE MEMBER TO PROVIDE ADEQUATE WIDTH FOR FASTENING. USE METAL BACKER PLATES FOR ½" THROUGH BOLTS.

CLEATS SHALL BE PROVIDED FOR FLOATING DOCK, TWO ON EACH SIDE 1' FROM EACH END. CLEAT SIZE SHALL BE 10" (FOLLANSBEE C-10-M OR EQUAL) AND SHALL BE

A VINYL BUMPER STRIP SHALL BE PROVIDED ALONG THE OUTBOARD SIDE OF THE FLOATING DOCK. BUMPER STRIP SHALL BE AS MANUFACTURED BY "FOLLANSBEE" MODEL VRR-2 OR EQUAL.

RAMP SHALL BE ALUMINUM AND CONSTRUCTION SHALL BE BY MANUFACTURER REGULARLY ENGAGED IN THE TRADE. RAMP SHALL BE CONNECTED TO FIXED PORTION OF DOCK AS RECOMMENDED BY MANUFACTURER. ROLLER ASSEMBLY AT FLOATING DOCK SHALL BE 2" DIAMETER BY 6" WIDE SMALL ROLLER TYPE. INSTALL PLASTIC OR METAL SHEET TO DECK, FOR ROLLERS.

UTILITY SPECIFICATIONS:

FASTENED TO WOOD MEMBERS USING CLEAT ANGLES.

ALL UTILITY WORK SHALL BE PERFORMED BY LICENSED CONTRACTORS IN THEIR RESPECTIVE TRADES. ALL WORK SHALL MEET REQUIREMENTS OF THE CURRENT STATE BUILDING CODES.

ELECTRICAL WIRE SHALL BE SIZED BY THE ELECTRICAL CONTRACTOR. WIRE SHALL BE ENCASED IN PVC CONDUIT SUITABLE FOR MARINE APPLICATION. INSTALL EXTERIOR—TYPE, MARINE GRADE, DOUBLE RECEPTACLE AT END OF PIER AS INDICATED.

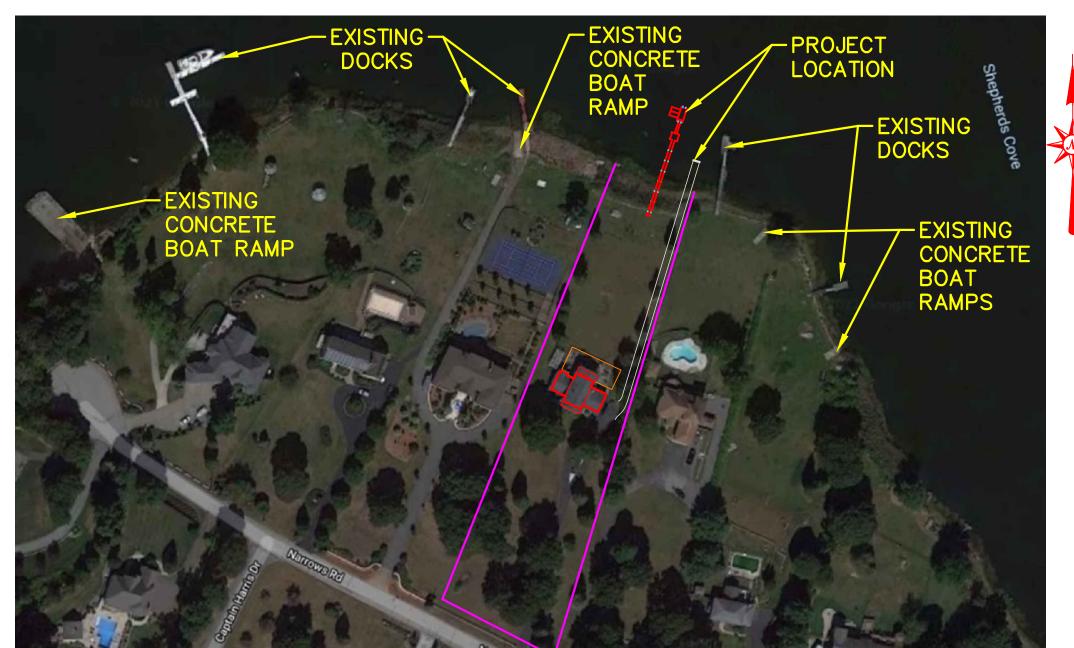
WATER LINE SHALL BE 3/4" POLYTHYLENE TUBING AS MANUFACTURED BY "AQUAPEX" OR EQUAL. INSTALL SUITABLE BACKFLOW PREVENTER AT EITHER EXISTING DWELLING OR PIER HEAD AS REQUIRED BY CODE. PROVIDE DRAIN AT PIER HEAD TO ALLOW REMOVAL OF WATER FROM THE LINE DURING THE WINTER MONTHS. INSTALL SPIGOT AT END OF PIER AS INDICATED.

ELECTRIC/WATER UTILITY LINES SHALL BE CONNECTED AT EXISTING DWELLING. LINES SHALL BE BURIED A MINIMUM DEPTH OF 12" ACROSS EXISTING LAWN AREA.

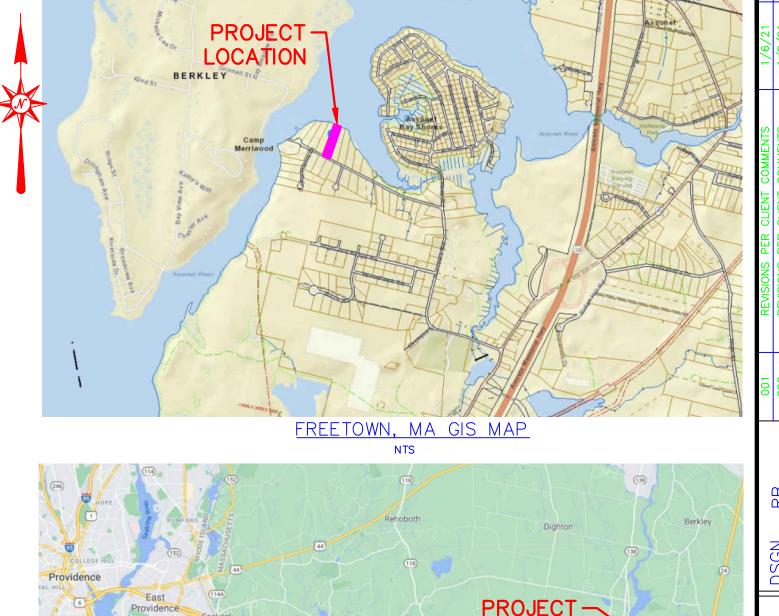
UTILITIES SHALL BE SECURED TO UNDERSIDE OF PIER AS INDICATED, WITH GALVANIZED METAL FASTENERS EVERY 5' ON CENTER.

LOW VOLTAGE LIGHTING SHALL BE PROVIDED ALONG THE DOCK AS INDICATED. LIGHTING TYPE TO BE PROPOSED BY CONTRACTOR. INCLUDE LOW VOLTAGE WIRING IN

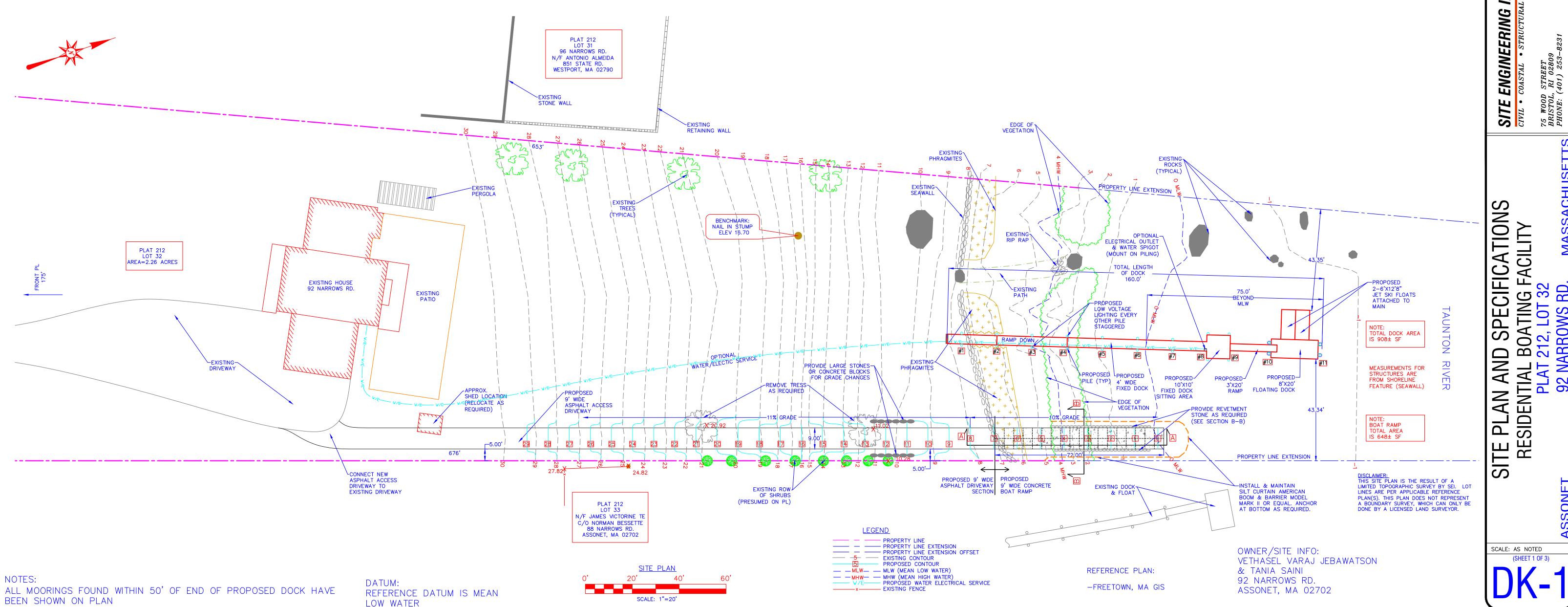
ELECTRICAL CONDUIT OR SEPERATE CONDUIT AS REQUIRED BY CODE.

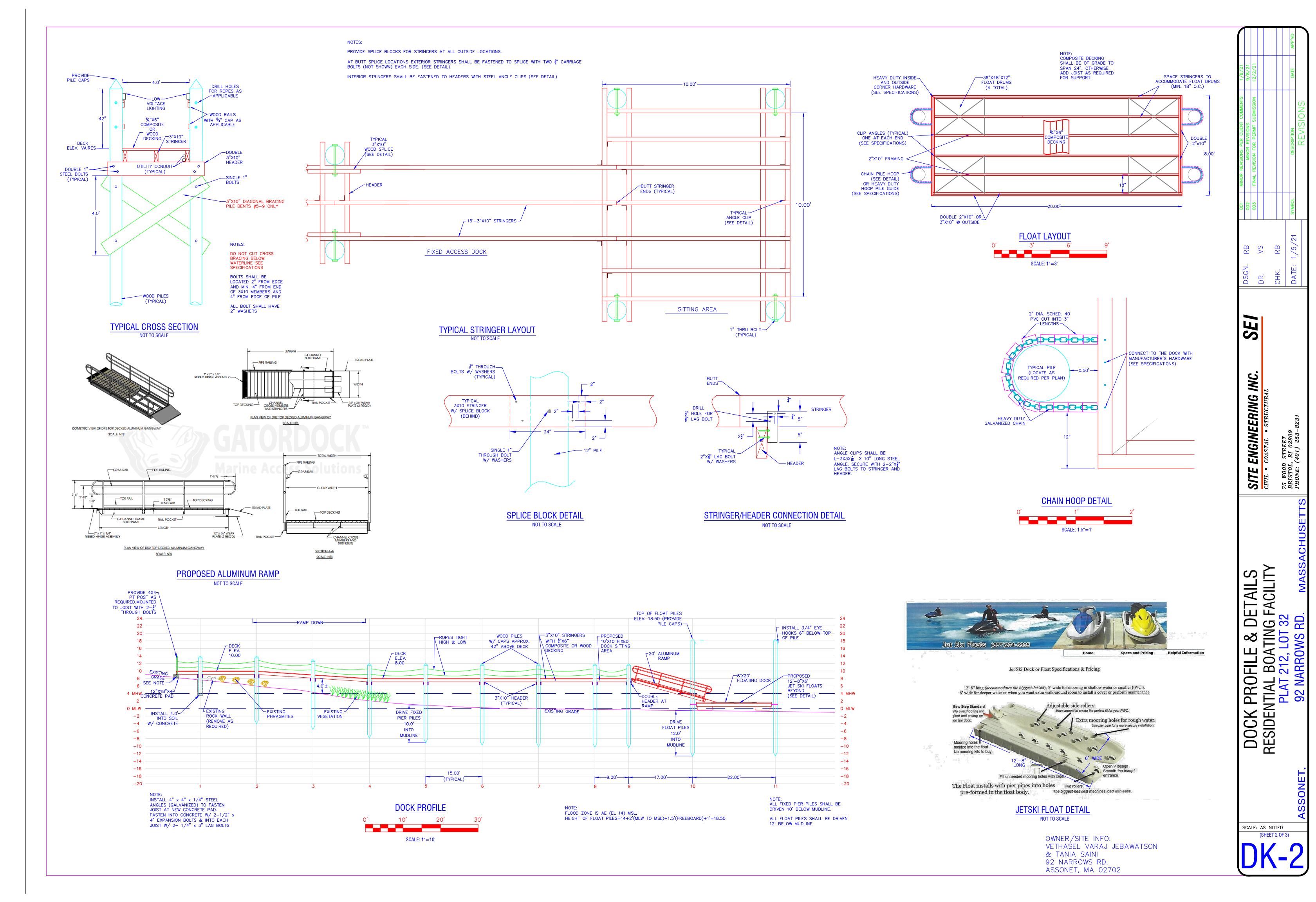


AERIAL PHOTO



LOCUS PLAN





PRECAST SLAB SPECIFICATIONS:

CONCRETE FOR SLABS SHALL BE TYPE III (HIGH EARLY STRENGTH/SULFATE RESISTANT) WITH 6% ENTRAINED AIR CONTENT, A WATER/CEMENT RATIO NOT TO EXCEED 0.45, AND A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 5000 PSI. SLUMP SHALL BE NO GRÉATER THAN 2" AND ALL CONCRETE SHALL BE VIBRATED INTO PLACE. LARGE AGGREGATE FOR ALL CONCRETE SHALL BE 3/4".

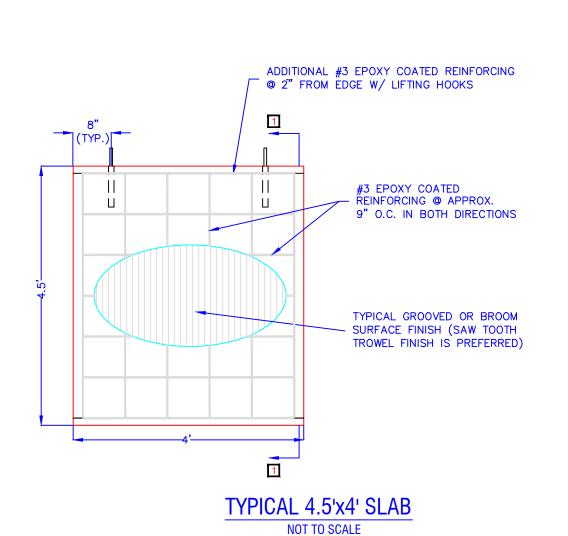
ALL REINFORCING RODS FOR NEW CONCRETE SLABS SHALL BE ASTM A-615, GRADE 60 EPOXY COATED FOR MARINE APPLICATION WITH A MINIMUM COVER OF 2".

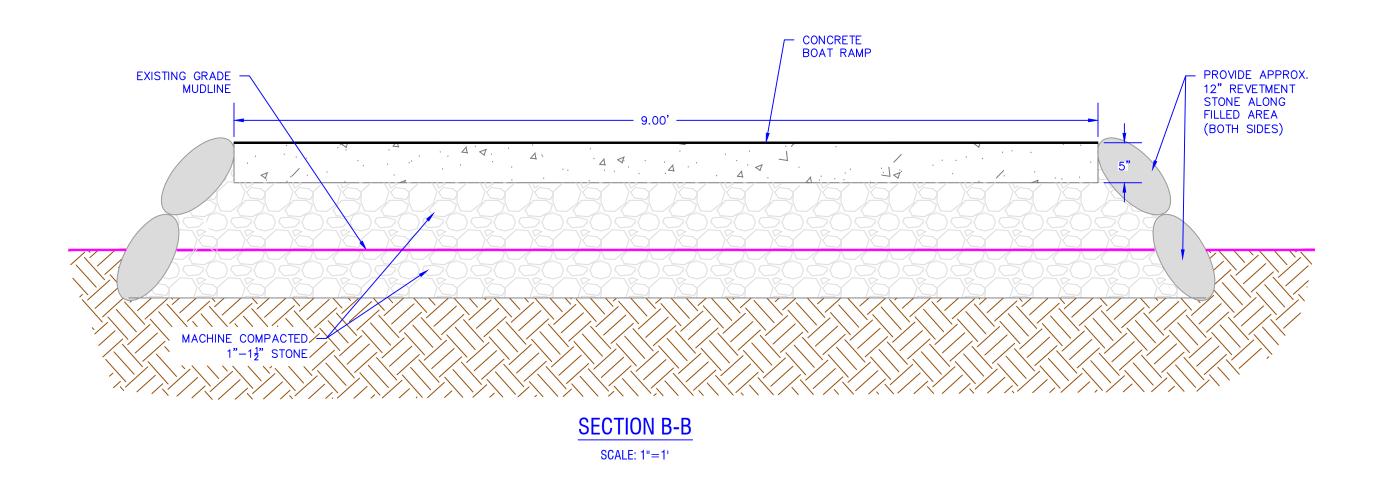
CONCRETE SLABS MAY BE EITHER PRE-CAST BY CONTRACTOR ON-SITE, OR MAY BE PRE-CAST OFF SITE BY SUPPLIER.

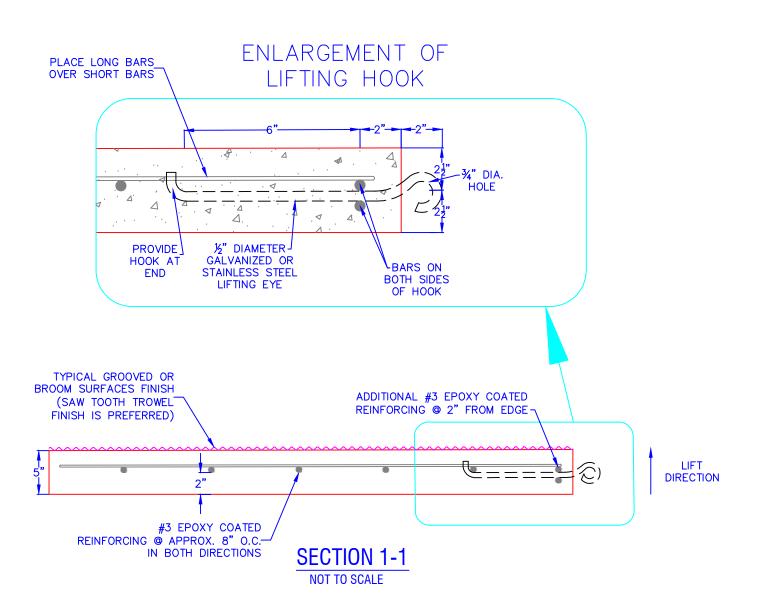
FOR SLABS CAST ON-SITE: - CURE FOR A MINIMUM OF 7 DAYS PRIOR TO LIFTING.

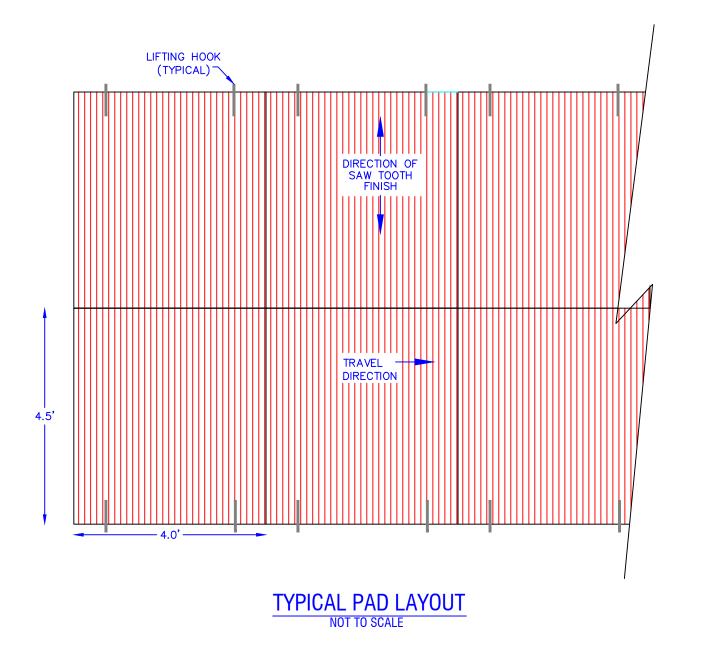
- IMMEDIATELY AFTER CONCRETE HAS SET MOISTEN AND COVER WITH POLYETHYLENE TO - USE APPROPRIATE BOND BREAKING AGENT ON EXISTING PAVEMENT SURFACE (PLASTIC SHEETING). UPON COMPLETION OF WORK CLEAN PAVEMENT SURFACE TO RESTORE PAVEMENT TO EXISTING CONDITION.

CONTRACTOR MAY PROPOSE ALTERNATE CONCRETE SLAB DIMENSION. FOR EXAMPLE, 9'X3' PADS, OR OTHER CONVENIENT DIMENSIONS MAY BE USED. IF SO, CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO DESIGN ENGINEER FOR REVIEW AND APPROVAL.









OWNER/SITE INFO: VETHAŚEL VARAJ JEBAWATSON & TANIA SAINI 92 NARROWS RD. ASSONET, MA 02702

ENGINEERING I SITE CIVIL

BOAT RAMP PROFILE & DETAILS
RESIDENTIAL BOATING FACILITY
PLAT 212, LOT 32
92 NARROWS RD. MASSAC

SCALE: AS NOTED